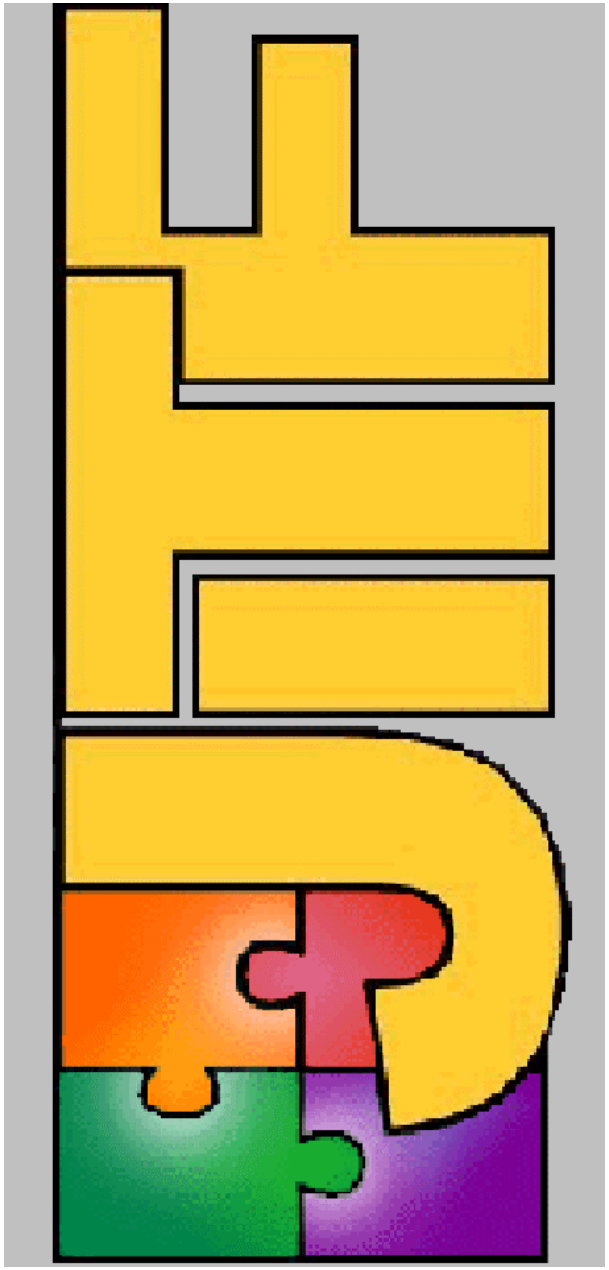
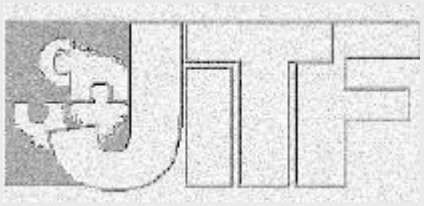


Performance Measurement

at the Joint Integration Test Facility

Joint Integration Test Facility, AFRL/IFEB
32 Brooks Road, Rome, New York 13441-4114
http://www.if.afrl.af.mil/programs/jitf/index.html

Performance Measurement Plan



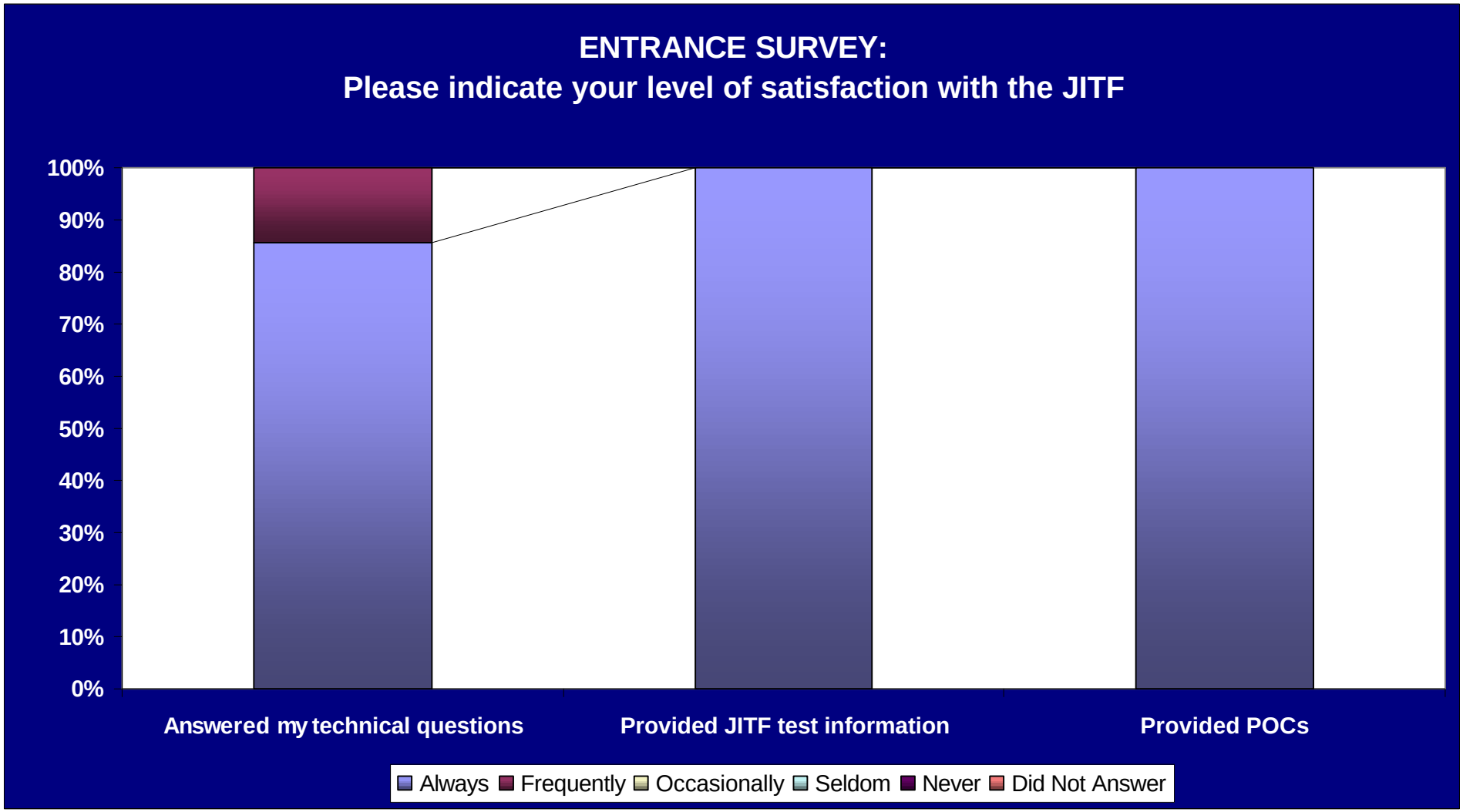
Establishes six measurements based on goals of the enterprise:

- Goal 1 – Maximize Customer Satisfaction
  - *Measure 1.A. – Customer Surveys*
  - *Measure 1.B – Timeliness of Test Reporting*
- Goal 2 – Increase quality of Intelligence Mission Applications (IMA)
  - *Measure 2.A – Requirements Met*
  - *Measure 2.B – Requirements Not Met*
- Goal 3 – Maximize Efficiency
  - *Measure 3.A – Schedule Volatility*
  - *Measure 3.B – Comments Against Test Report*

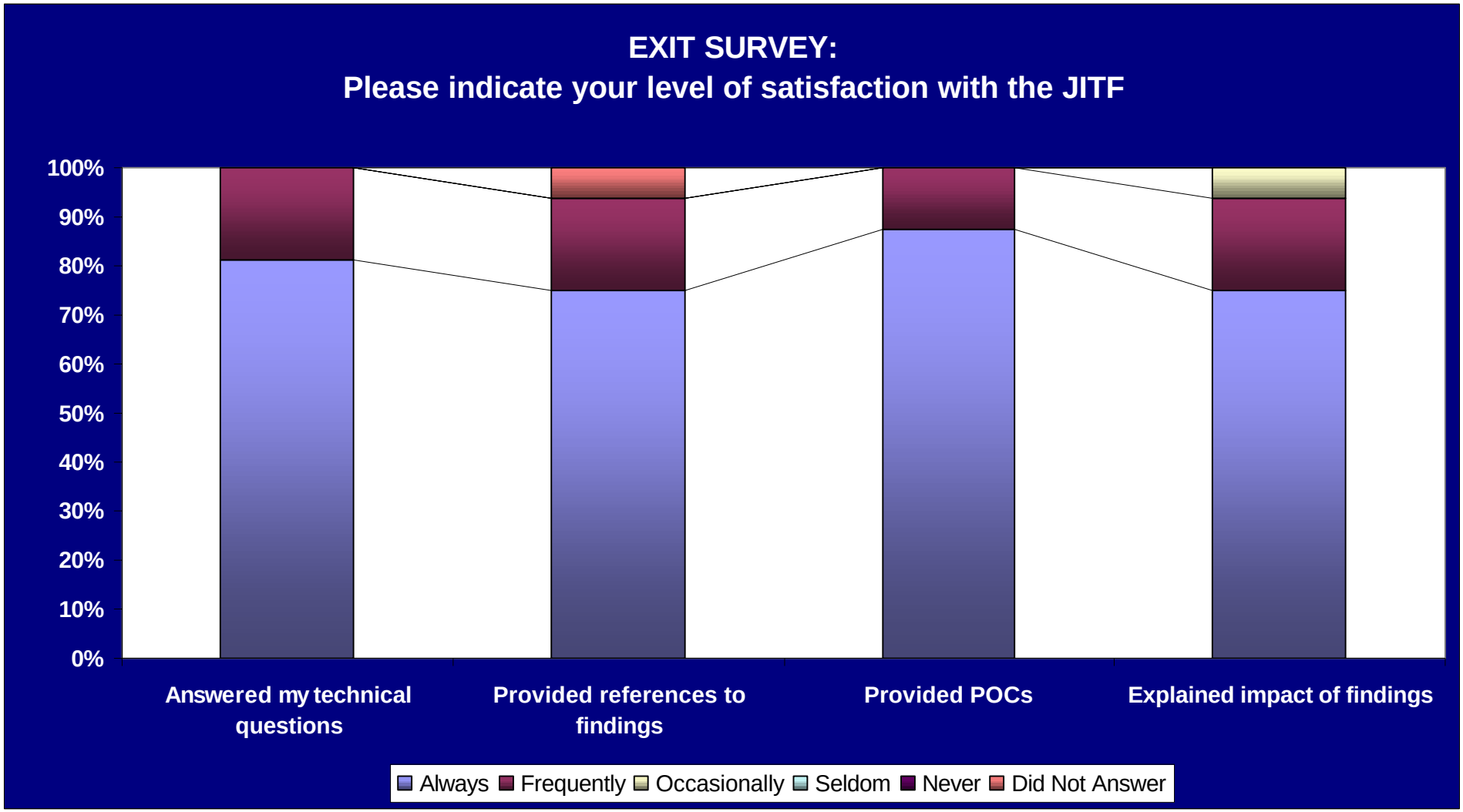
Metric 1A: Customer Surveys

- Standards/targets – minimum of 90% customer satisfaction.
- Conducted Program Management Office (PMO) Entrance and Exit Surveys
  - 100% satisfaction rating in Entrance Surveys
  - 96.9% satisfaction rating in Exit Surveys
- Test Study Review provided informative feedback
- Formal User Surveys are planned for FY2001

PMO Entrance Survey Satisfaction Levels



PMO Exit Survey Satisfaction Levels



Metric 1B: Timeliness of Test Reporting

- Standards/targets –

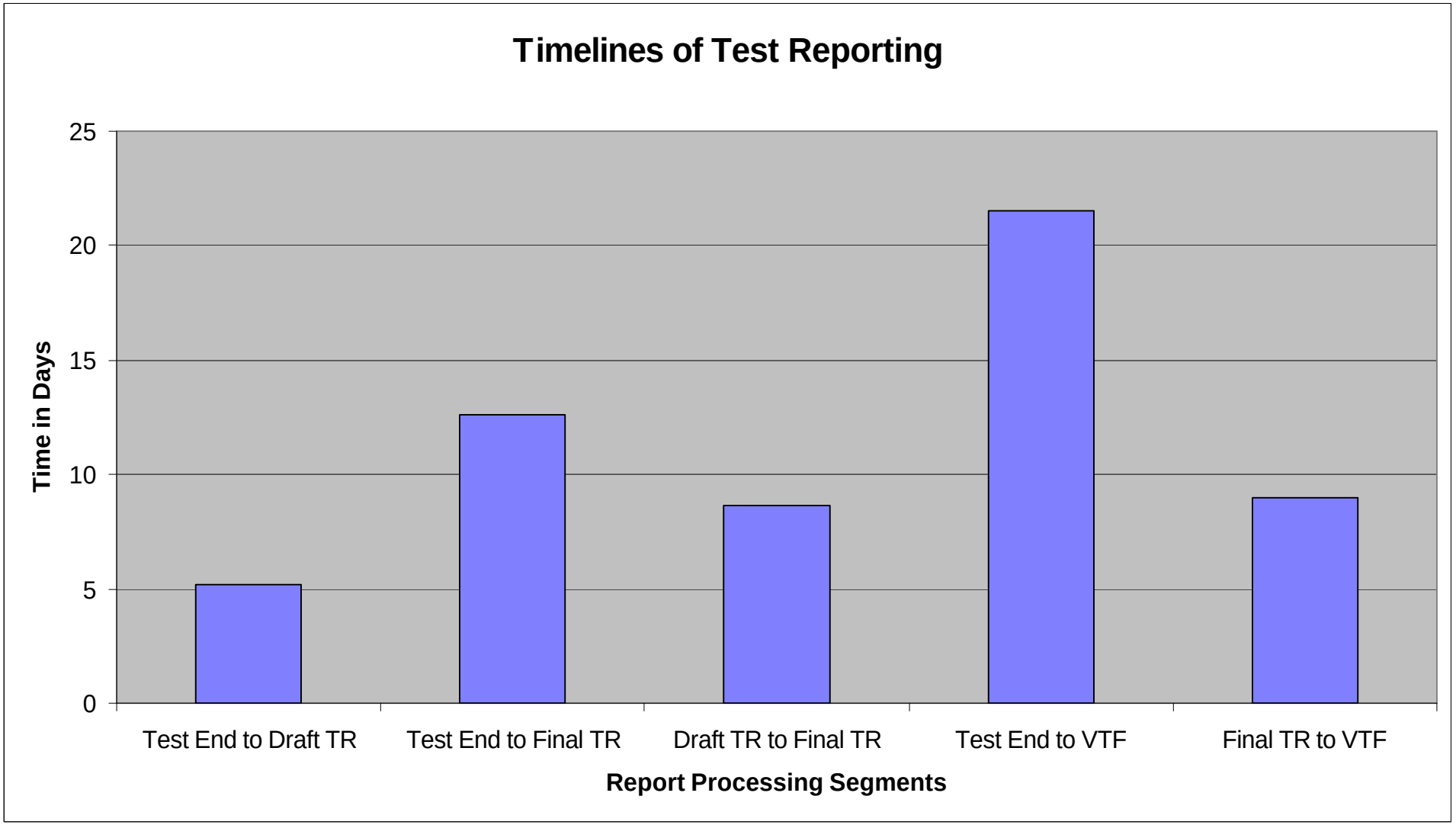
  Publish Draft Test Report within 5 days after completion of testing. We averaged 5.15 days.

  Publish Final Test Report within 10 days after completion of testing. We averaged 12.62 days.

  Post Final Test Report in the Virtual Test Folder within 20 days after completion of testing. We averaged 21.52 days.

- The process between the Draft and the Final needs more attention.

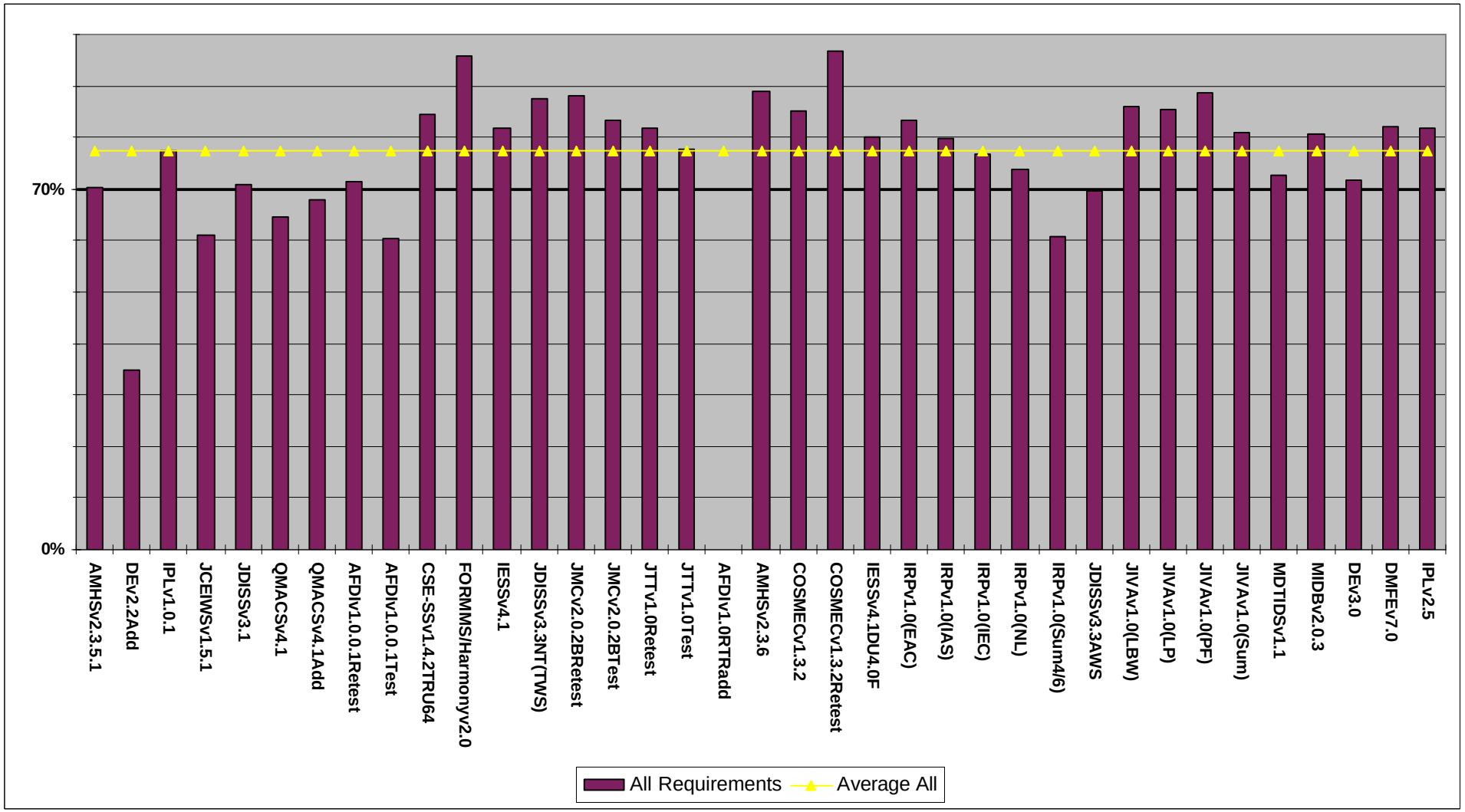
Timeliness of Test Reporting



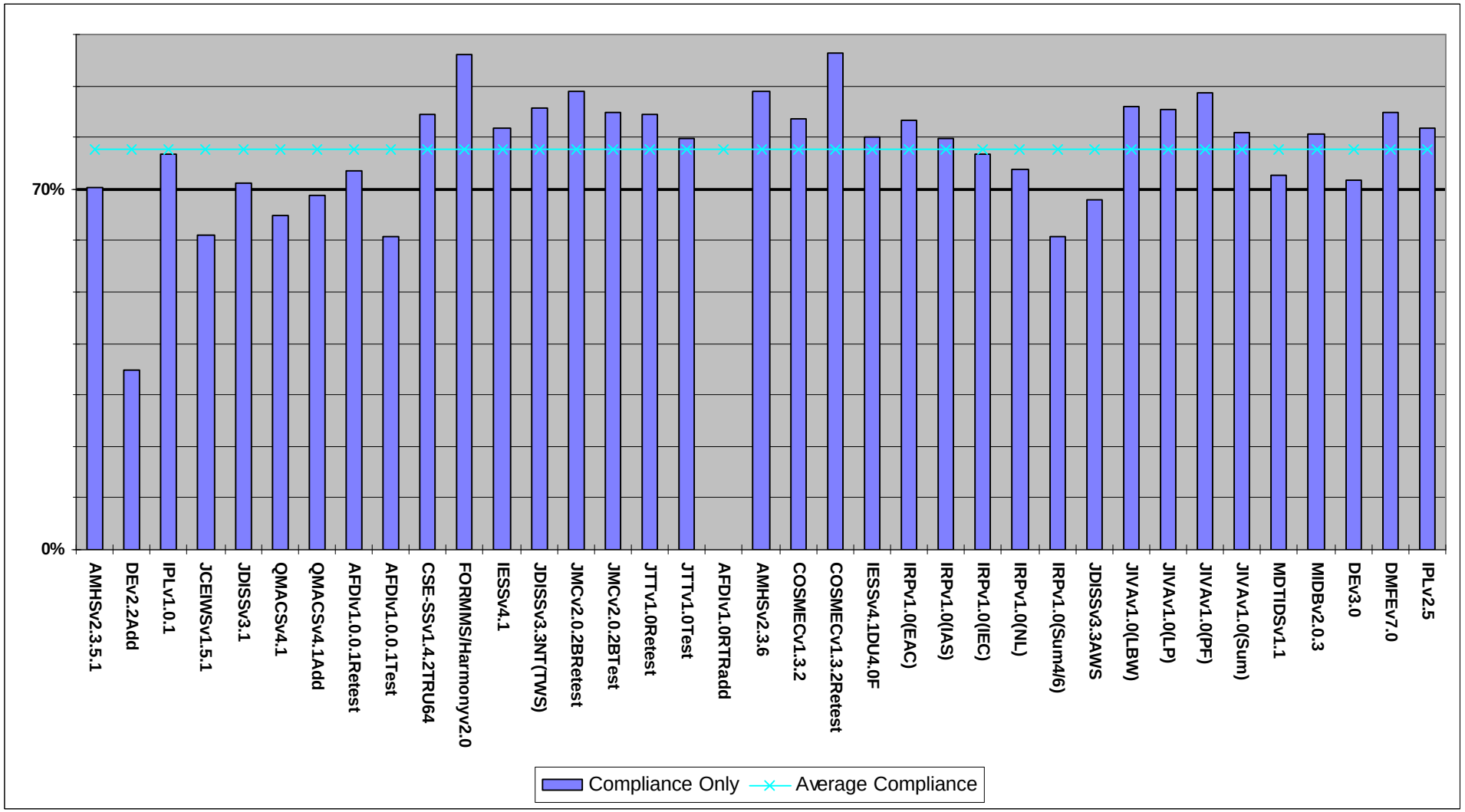
Metric 2A: Requirements Met

- Standards/targets – Increase Integration quality of IMAs tested in FY2000 by 5% over those tested in FY1999
- Average percentage of requirements met in FY1999 was 73.16%
- Target for FY2000 = 76.82%.
- Goal Exceeded.
- The average requirements met in FY2000 was 77.88%.
- This is an integration quality increase of 6.45 %.

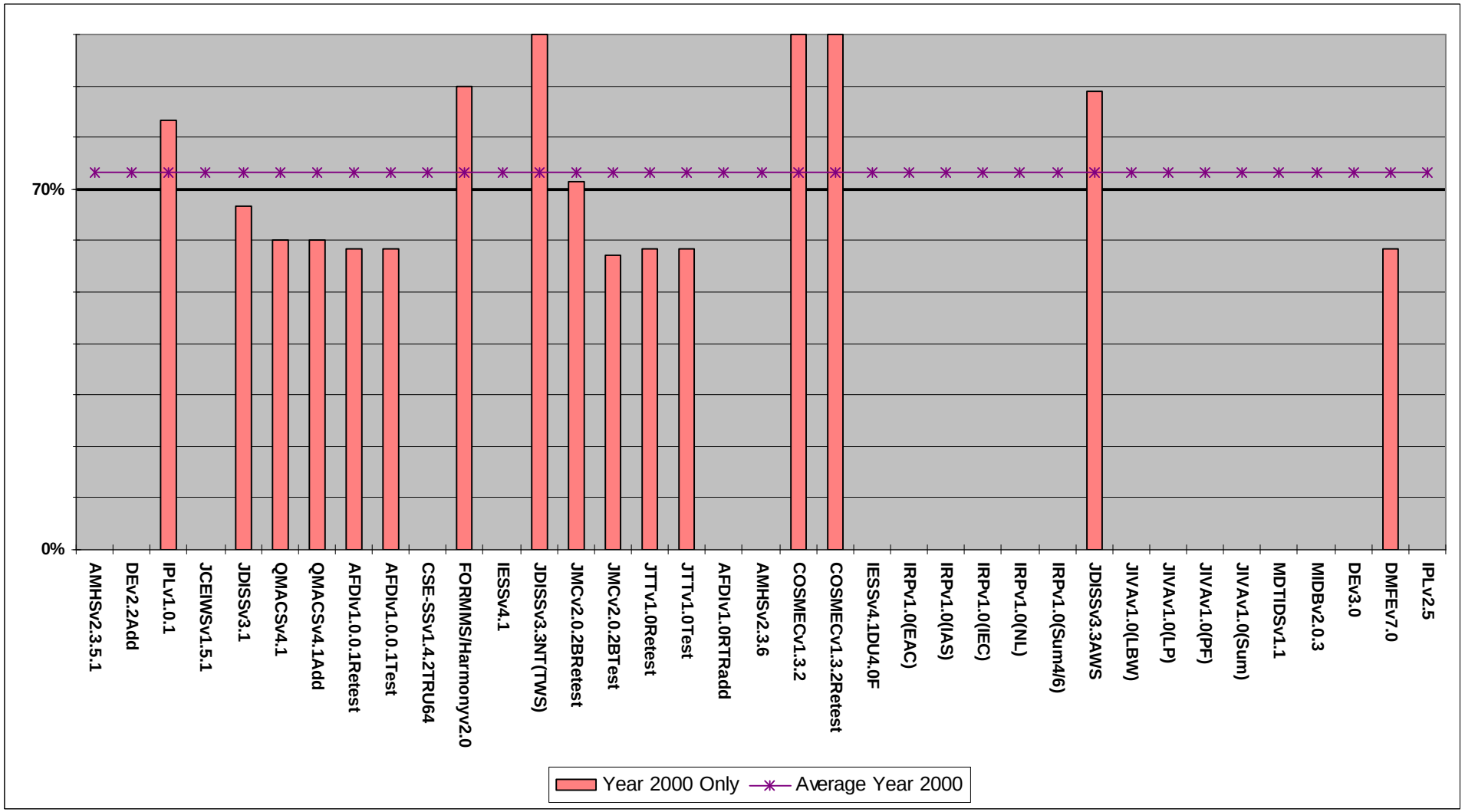
Requirements Met: All



Requirements Met: Compliance Only



Requirements Met: Year 2000 Only

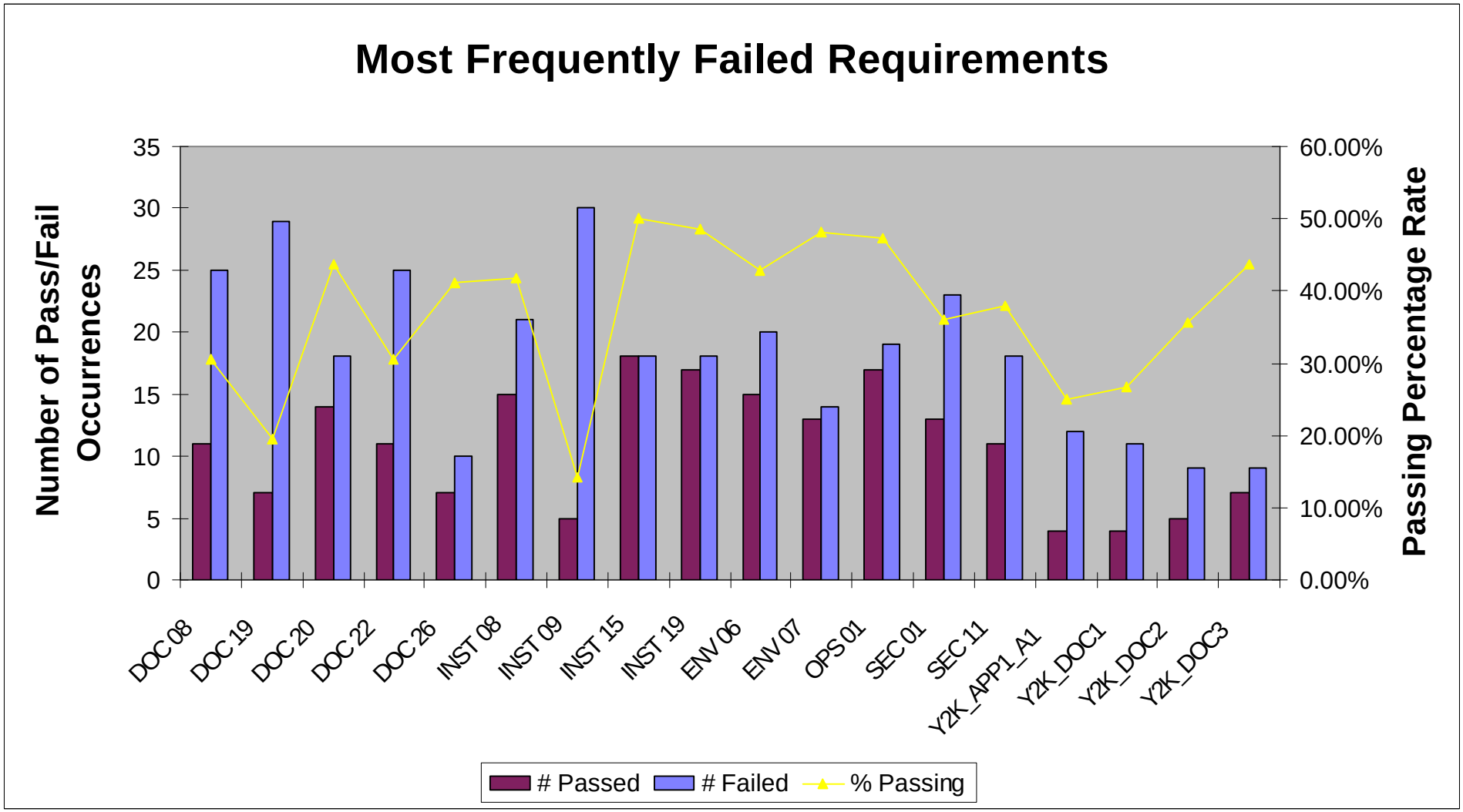


Metric 2B: Requirements Not Met

- Standards/targets – reduce the frequency of the most common defects by 5% in FY2001.
- Requirements which were failed more than 50% of the time in FY2000:

DOC 08	DOC 19	DOC 20	DOC 22
DOC 26	INST 08	INST 09	INST 15
INST 19	ENV 06	ENV 07	OPS 01
SEC 01	SEC 11	Y2K-APP.1(A.1)	
Y2K-DOC.1	Y2K-DOC.2	Y2K-DOC.3	

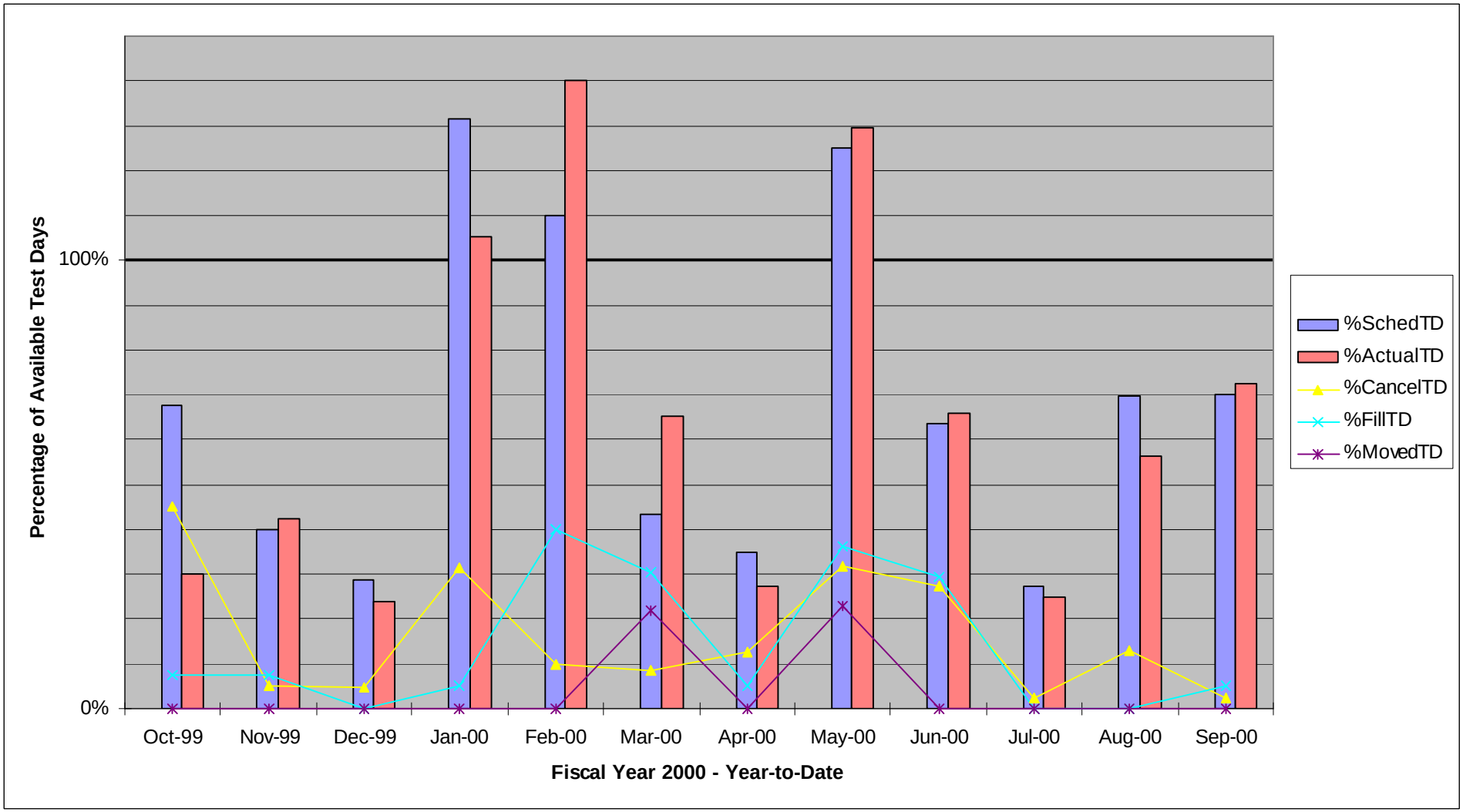
Requirements Not Met



Metric 3A: Schedule Volatility

- Standards/targets – reduce the schedule volatility by 5%
- 31 of 45 test events had scheduling changes less than 30 days prior to test.
- 68.89% schedule volatility
- The more “Line” graph activity, the more the schedule changed.
  - Movement line shows how much movement within the month.
  - Cancelled line shows how often scheduled test days were cancelled.
  - Filled line shows how often test events either extended the test event duration or required additional time for retesting.

Schedule Volatility



Metric 3B: Comments Against Test Report

- Standards/targets – No more than 3 typographical comments and 5 technical comments against the draft test report.
  - » NOTE: Below, technical comments are those counted under the "Protest" description.
- Typographical: Average = 2.3 occurrences per test

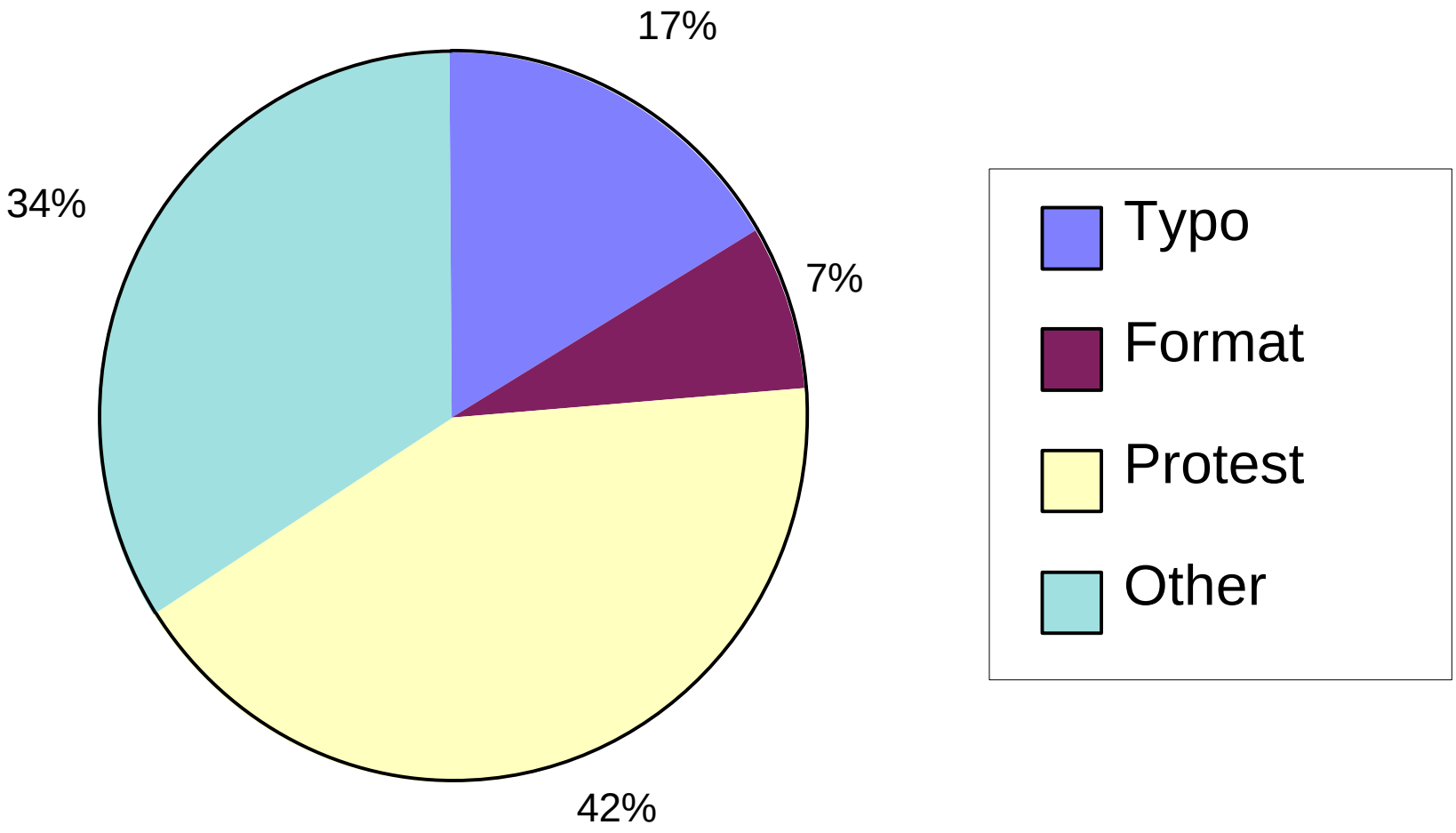
10 of 37 had more than 3 typographical errors.

- Protest: Average = 5.8 occurrences per test

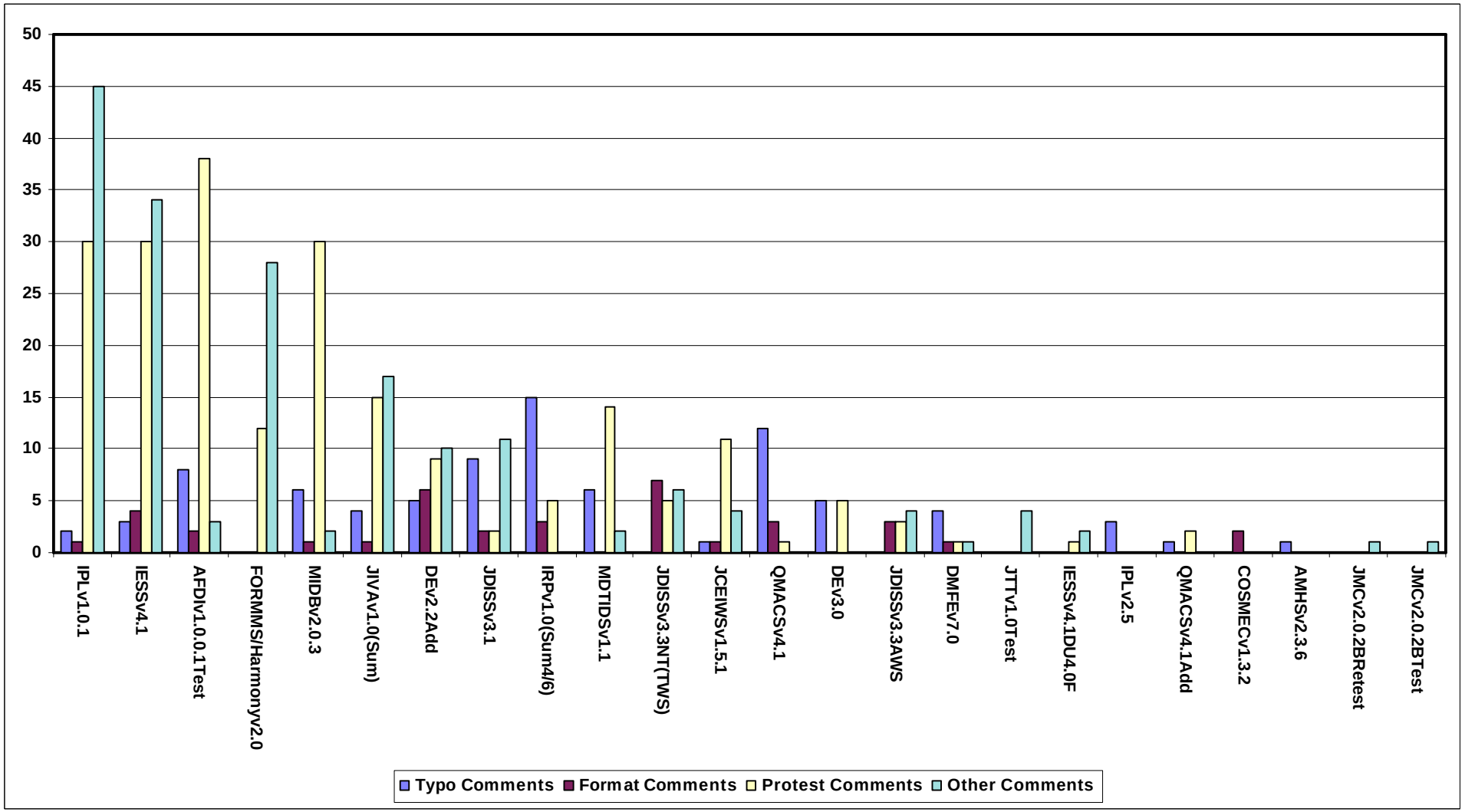
9 of 37 had more than 5 protests

- Format/Word-smithing: Average = 1.0 occurrences per test.
- Other (comments not related to the modification of the Draft TR): Average = 4.7 occurrences per test.
- Modify our protest goal to read "substantiated" protests.

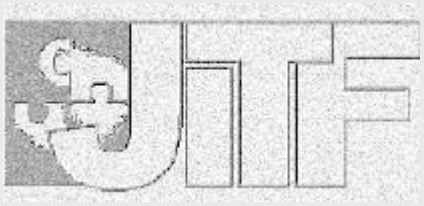
Comments Against Test Report



Comments Against Test Report

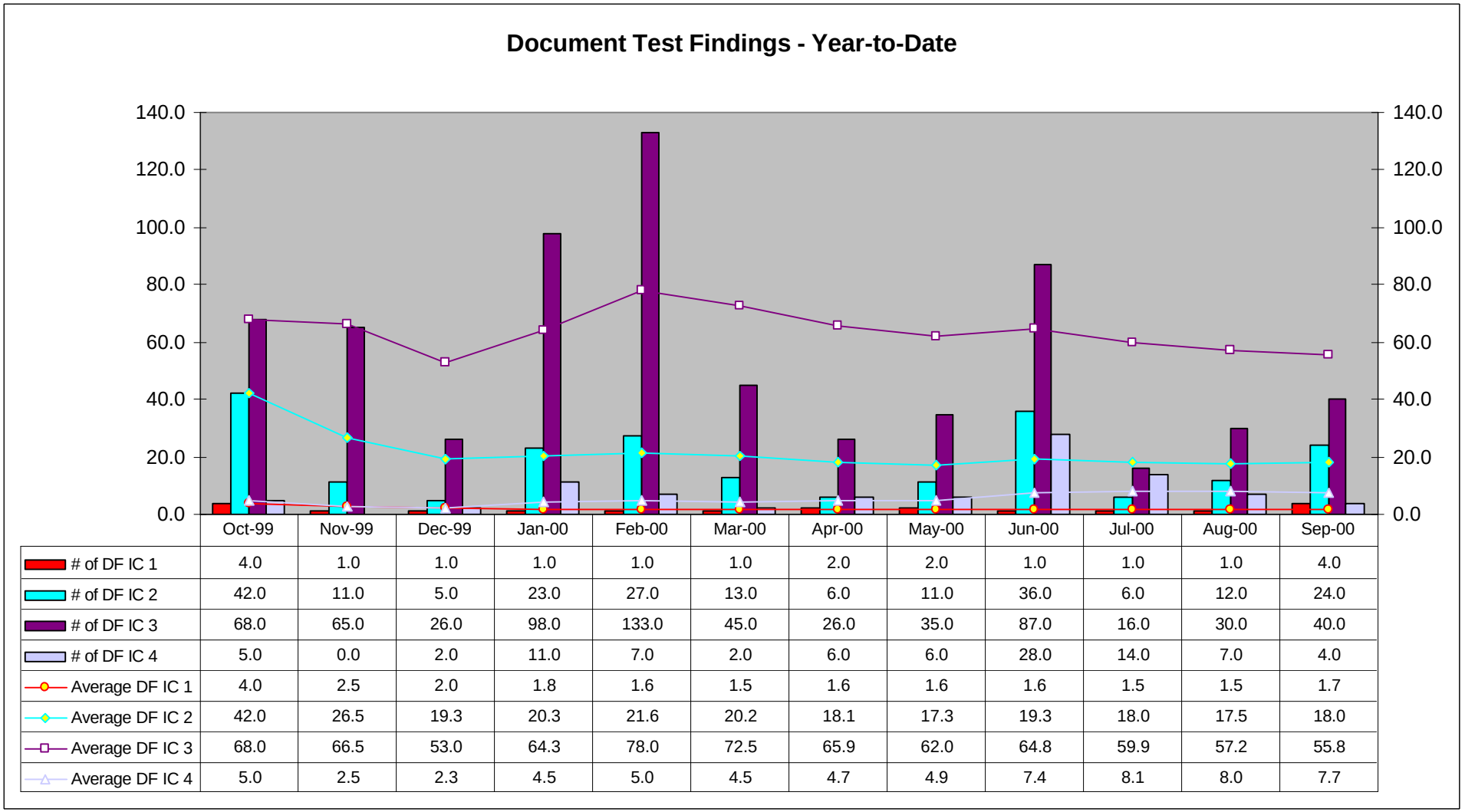


Defects Found in FY 2000



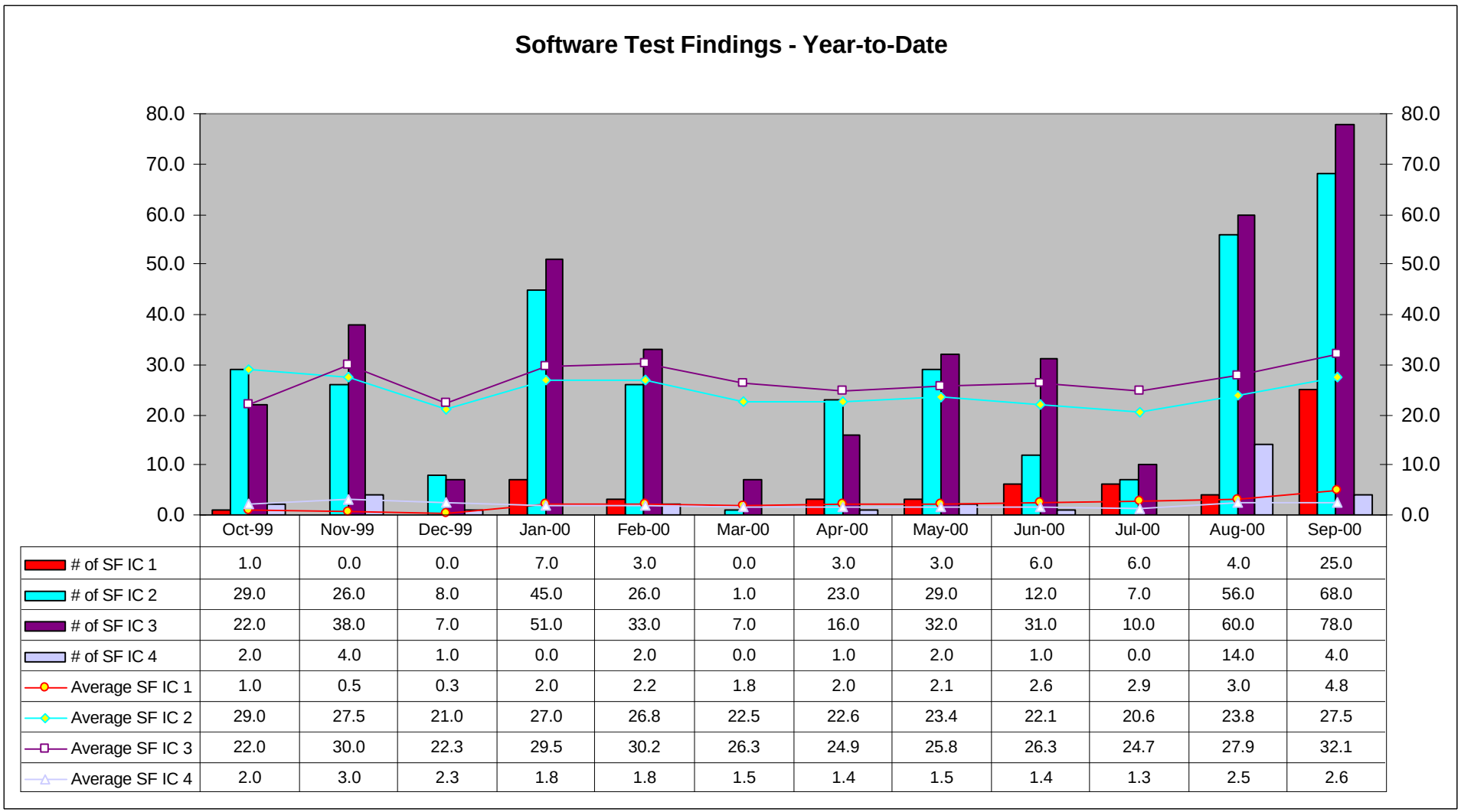
- Although this is not a performance measurement, we are tracking the number of integration defects identified in tested products.
- We feel that this is defect identification process assists the Program Management Offices to improve the integration quality of the end product.
- This ultimately assists the end-user in receiving the highest quality software possible.

Document Test Findings



	Oct-99	Nov-99	Dec-99	Jan-00	Feb-00	Mar-00	Apr-00	May-00	Jun-00	Jul-00	Aug-00	Sep-00
# of DF IC 1	4.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	1.0	1.0	1.0	4.0
# of DF IC 2	42.0	11.0	5.0	23.0	27.0	13.0	6.0	11.0	36.0	6.0	12.0	24.0
# of DF IC 3	68.0	65.0	26.0	98.0	133.0	45.0	26.0	35.0	87.0	16.0	30.0	40.0
# of DF IC 4	5.0	0.0	2.0	11.0	7.0	2.0	6.0	6.0	28.0	14.0	7.0	4.0
Average DF IC 1	4.0	2.5	2.0	1.8	1.6	1.5	1.6	1.6	1.6	1.5	1.5	1.7
Average DF IC 2	42.0	26.5	19.3	20.3	21.6	20.2	18.1	17.3	19.3	18.0	17.5	18.0
Average DF IC 3	68.0	66.5	53.0	64.3	78.0	72.5	65.9	62.0	64.8	59.9	57.2	55.8
Average DF IC 4	5.0	2.5	2.3	4.5	5.0	4.5	4.7	4.9	7.4	8.1	8.0	7.7

Software Test Findings



	Oct-99	Nov-99	Dec-99	Jan-00	Feb-00	Mar-00	Apr-00	May-00	Jun-00	Jul-00	Aug-00	Sep-00
# of SF IC 1	1.0	0.0	0.0	7.0	3.0	0.0	3.0	3.0	6.0	6.0	4.0	25.0
# of SF IC 2	29.0	26.0	8.0	45.0	26.0	1.0	23.0	29.0	12.0	7.0	56.0	68.0
# of SF IC 3	22.0	38.0	7.0	51.0	33.0	7.0	16.0	32.0	31.0	10.0	60.0	78.0
# of SF IC 4	2.0	4.0	1.0	0.0	2.0	0.0	1.0	2.0	1.0	0.0	14.0	4.0
Average SF IC 1	1.0	0.5	0.3	2.0	2.2	1.8	2.0	2.1	2.6	2.9	3.0	4.8
Average SF IC 2	29.0	27.5	21.0	27.0	26.8	22.5	22.6	23.4	22.1	20.6	23.8	27.5
Average SF IC 3	22.0	30.0	22.3	29.5	30.2	26.3	24.9	25.8	26.3	24.7	27.9	32.1
Average SF IC 4	2.0	3.0	2.3	1.8	1.8	1.5	1.4	1.5	1.4	1.3	2.5	2.6